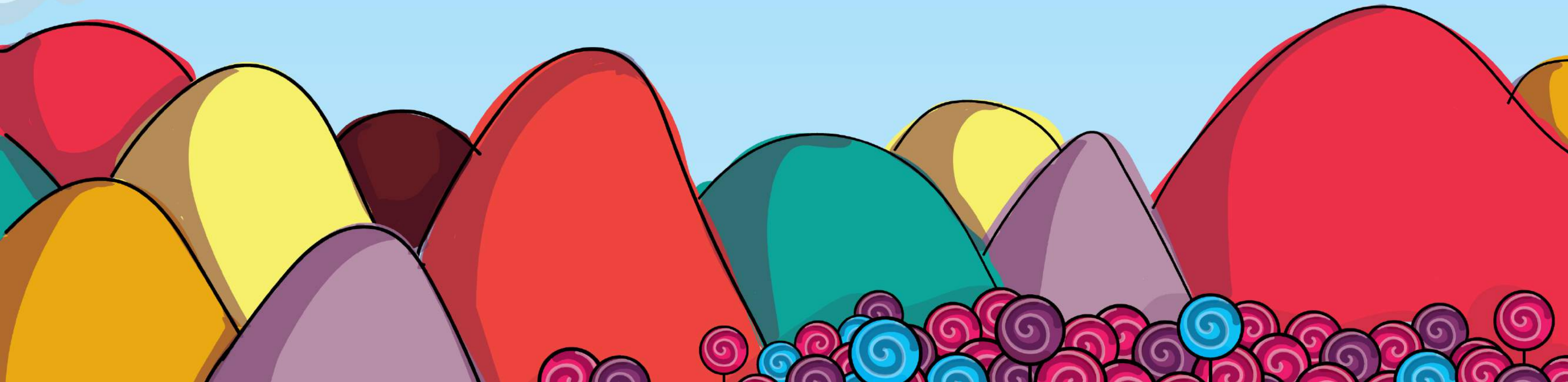




# ADVENTURES

IN WEB ANIMATIONS



# Level 3 – Keyframes

## SECTION 1

### **Creating and Reusing Keyframes**



# Our Site So Far

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PURCHASE SWEET LANDS

CC Type

Visa

CC Number

CC Expiration

Submit



CC Type

Visa

CC Number

CC Expiration

Submit

this should be a video

Transitions!

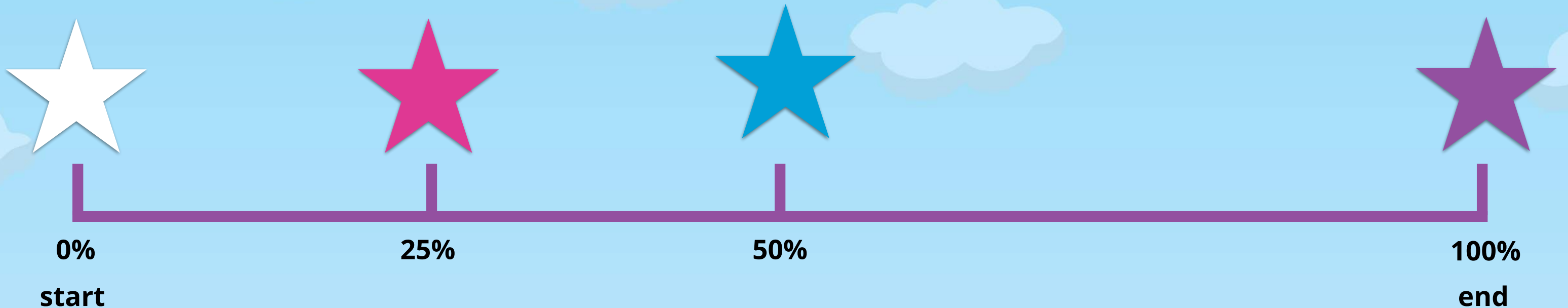
Transforms!



# Keyframe Animations

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A list of what should happen over the course of the animation — which properties should change, how, and when.

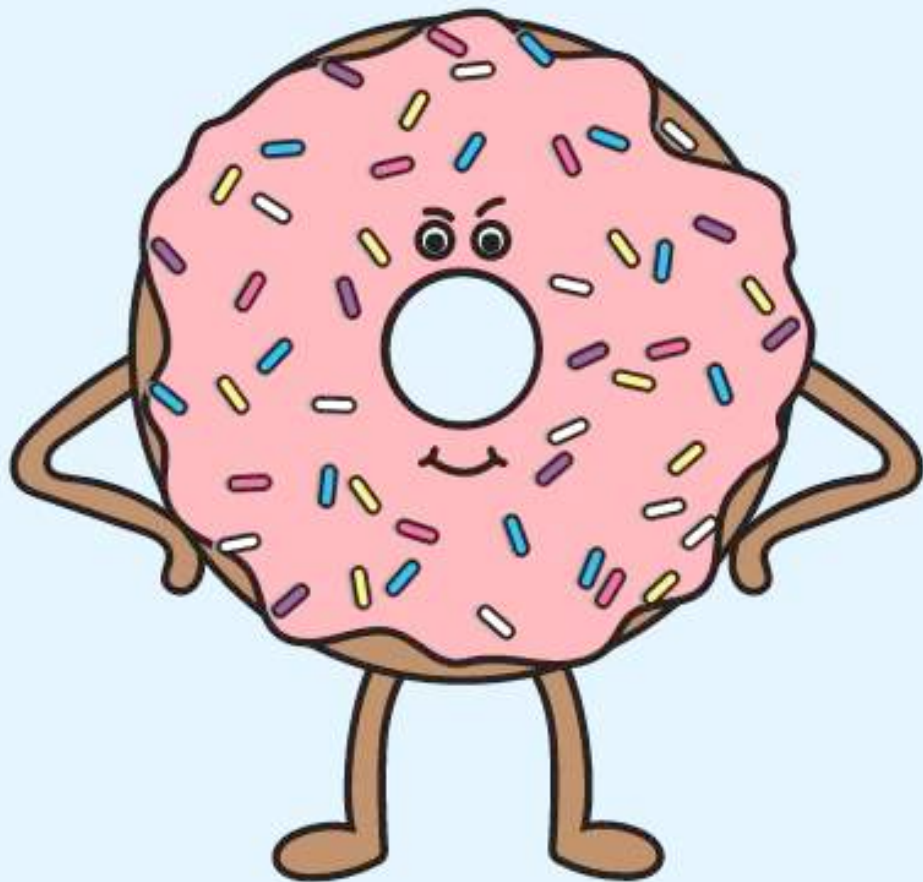


# Using @keyframes to Animate Characters

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Animating PNGs on your site can add a lot of personality and fun!

Let's start animating Beau Knut by moving just his arm inside a reusable keyframe.



# Creating the Swing Keyframe Animation

There are 2 parts to keyframe animations:

1. Create the Animation
2. Assign the Animation

This custom name could be  
'beau-knut-arm-swing'

```
@keyframes swing {  
  0% {transform: rotate(0deg);}  
  100% {transform: rotate(-10deg);}  
}
```

CSS

Declare the animation

keyframe recipe

```
@keyframes <name-animation> {  
  <step 1> {<property>: <value>;}  
  <step 2> {<property>: <value>;}  
}
```

Define steps of the animation

**from** is a shortcut for writing **0%**

**to** is a shortcut for writing **100%**

# Assign the Animation to an Element

There are 2 parts to keyframe animations:

1. Create the Animation ✓
2. Assign the Animation

```
@keyframes swing {  
  0% {transform: rotate(0deg);}  
  100% {transform: rotate(-10deg);}  
}
```

CSS

Duration must  
come before delay!

duration delay

```
#left-arm {  
  animation: swing 2s 0s infinite ease;  
}
```

CSS

name

iteration

timing function

how many times to run



our donut's arm  
looks weird!

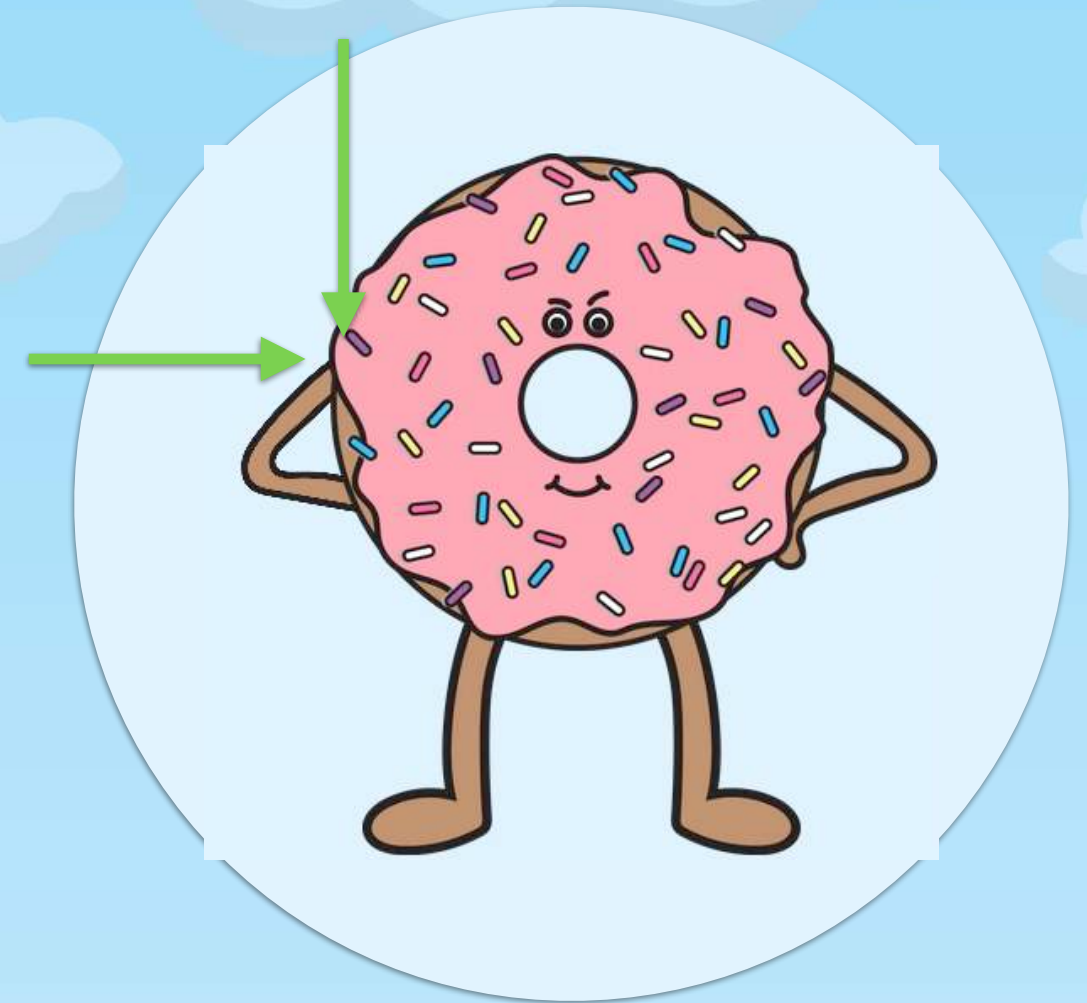


# Fixing the Arm By Adjusting the Origin

Specify a different transform origin so our arm rotates properly from the top and not around the elbow.

```
CSS
@keyframes swing {
  0% {transform: rotate(0deg);}
  100% {transform: rotate(-10deg);}
}

#left-arm {
  transform-origin: top center;
  animation: swing 2s infinite;
}
```



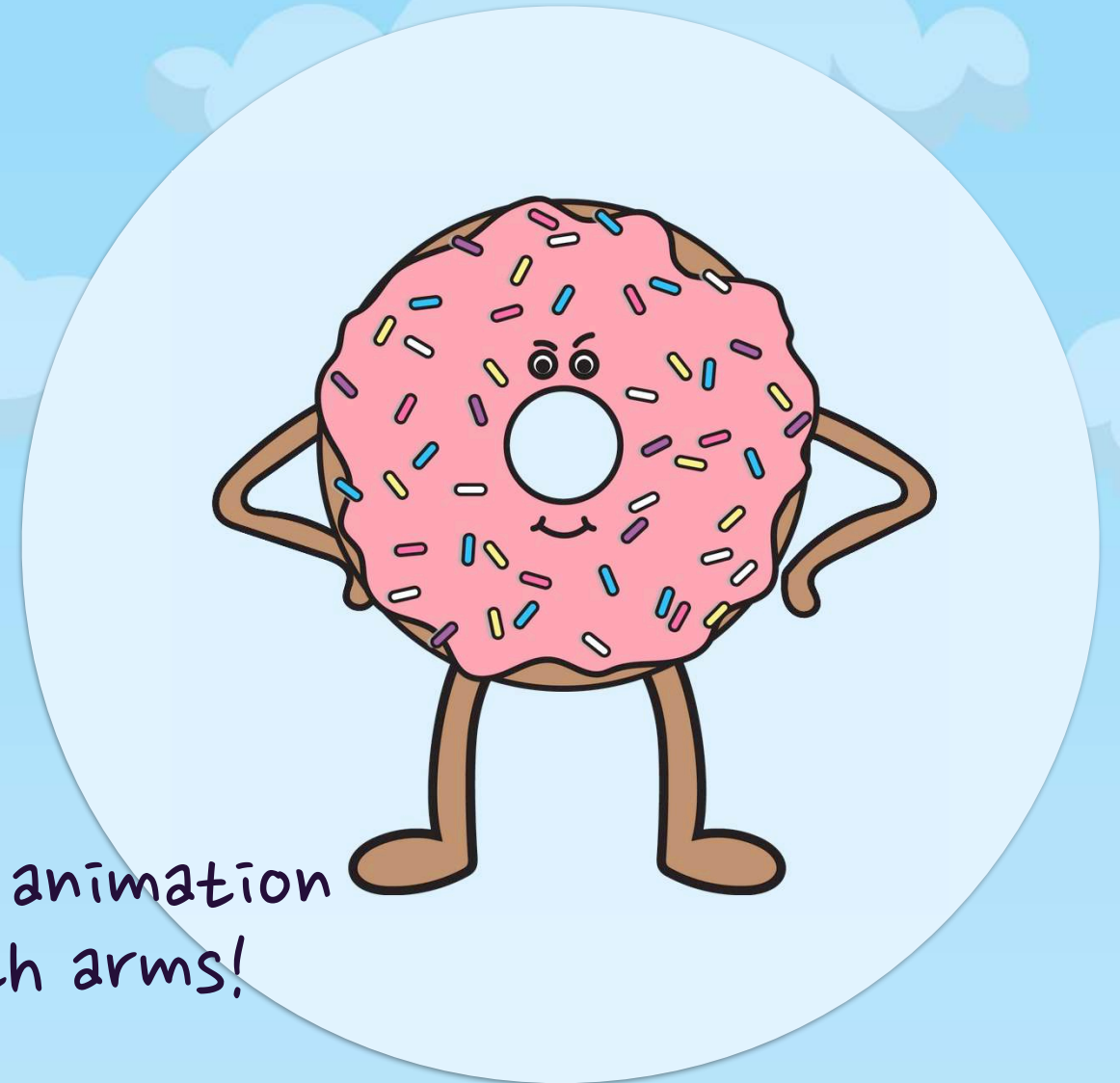


# Reuse the Swing Animation Keyframe

Now let's animate the right arm by reusing our swing animation.

CSS

```
@keyframes swing {  
  0% {transform: rotate(0deg);}  
  100% {transform: rotate(-10deg);}  
}  
  
#left-arm {  
  transform-origin: top center;  
  animation: swing 2s infinite;  
}  
  
#right-arm {  
  transform-origin: top center;  
  animation: swing 2s infinite;  
}
```



The same animation  
for both arms!